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| APPLICATION NO. | T I | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|--|----------|-------------|----------------------|--------------------------|-----------------|--|
| 09/848,846 | <u> </u> | 05/03/2001 | Luan C. Tran | MI22-1689 | | |
| 21567 | 7590 | 03/24/2004 | | EXAMINER | | |
| WELLS S | | | SCHILLINGER, LAURA M | | | |
| 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201 | | | | ART UNIT | PAPER NUMBER | |
| | , | | | 2813 | | |
| | | | | DATE MAII ED: 03/24/2004 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | | |
|---|--|--|--|--|--|--|--|--|
| , | 09/848,846 | TRAN, LUAN C. | | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | | |
| TI MAIL INO DATE CHI | Laura M Schillinger | 2813 | | | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above, the maximum statutory peri- - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the ma- earned patent term adjustment. See 37 CFR 1.704(b). | N. 1.136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) days od will apply and will expire SIX (6) MONTHS from tute, cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133). | | | | | | |
| Status | | | | | | | | |
| 1) Responsive to communication(s) filed on 19 | <u> December 2003</u> . | | | | | | | |
| 2a) This action is FINAL . 2b) ⊠ T | | | | | | | | |
| 3) Since this application is in condition for allow | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | | |
| closed in accordance with the practice unde | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | | |
| 4) Claim(s) 11-15 is/are pending in the application. 4a) Of the above claim(s) 13 and 15 is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 11,12 and 14 is/are rejected. | | | | | | | | |
| | Claim(s) is/are objected to. Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Application Papers | | | | | | | | |
| 9) The specification is objected to by the Examination The drawing(s) filed on is/are: a) and a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the | nccepted or b) objected to by the E he drawing(s) be held in abeyance. See rection is required if the drawing(s) is obj | e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d). | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 12/19/03. | 4) Interview Summary Paper No(s)/Mail Da 08) 5) Notice of Informal P 6) Other: | | | | | | | |

DETAILED ACTION

Election/Restrictions

Newly submitted claims 13-15 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 13 and 15 pertain to a separate species of invention which include masking only portions of peripheral devices and including only one source or drain.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 13-15 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dennison ('449).

In reference to claim 11, Dennison teaches a method comprising:

A masking step providing a common mask (Fig.2 (38)); and

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An implant step carried through the common mask, comprising conducting a halo implant of devices formed over a substrate comprising memory circuitry and peripheral circuitry sufficient to impart to at least two of the devices two different respective threshold voltages (Col.2, lines: 50-65, see also Fig.2 ((26), (18), and (22)), wherein the common masking step comprises masking only some of the devices which receive the halo implant, the portions comprising portions of peripheral circuitry (Fig.5 (66)).

However, Dennison fails to teach "at least three of the devices having three different threshold voltages. However, the courts have held that mere duplication of parts has no patentable significance unless a new or unexpected result is produced see *In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).

In reference to claim 12, Dennison teaches a method comprising:

A masking step providing a common mask (Fig.2 (38)); and

An implant step carried through the common mask, comprising conducting a halo implant of devices formed over a substrate comprising memory circuitry and peripheral circuitry sufficient to impart to at least two of the devices two different respective threshold voltages (Col.2, lines: 50-65, see also Fig.2 ((26), (18), and (22)), wherein the common masking step comprises masking only some of the devices which receive the halo implant, the devices being NMOSFETs, the portions comprising portions of peripheral circuitry (Fig.5 (66) and (Fig.2 (24, peripheral areas are (26) see also Col.3, lines: 10-20).

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In reference to claim 14, Dennison teaches a method comprising:

A masking step providing a common mask (Fig.2 (38)); and

An implant step carried through the common mask, comprising conducting a halo implant of devices formed over a substrate comprising memory circuitry and peripheral circuitry sufficient to impart to at least two of the devices two different respective threshold voltages (Col.2, lines: 50-65, see also Fig.2 ((26), (18), and (22)), wherein the common masking step comprises masking only some of the devices which receive the halo implant, the devices being PMOSFETs, the portions comprising portions of peripheral circuitry (Fig.5 (66) and (Fig.3 (22) see also Col.3, lines: 60-65).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dennison ('249) teaches similar NMOS and PMOS devices having memory areas and peripheral areas and utilizing partial masks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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